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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,047	04/29/2002	Tuan Vo-Dinh	4310.004400/	7588

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EXAMINER

FORMAN, BETTY J

ART UNIT

PAPER NUMBER

1634

DATE MAILED: 09/30/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,047

Applicant(s)

VO-DINH, TUAN

Examiner

BJ Forman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 42-69 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

2. The species are as follows:

FIRST SPECIES ELECTION REQUIREMENT:

Species A: a solid support which is a substrate;

Species B: a solid support which is a filter; and

Species C: a solid support which is a membrane connected between a plurality of receptors and an integrated circuit.

The species listed above are distinct because they each have different significant structural elements e.g. the significant structural element Species B is the porousness and the significant structural element of Species C is the connection between the receptors and circuit. Therefore, the above species do not share significant structural elements.

*Claim 46 corresponds to the species listed above.

SECOND SPECIES ELECTION REQUIREMENT:

Species D: an excitation source disposed on-chip; and

Species E: an excitation source disposed off-chip.

The species listed above are distinct because they each have different significant structural elements i.e. the significant structural element of Species D is the excitation source on the chip and the significant structural element of Species E is the excitation source off the chip. Therefore, the above species do not share significant structural elements.

*Claims 53 and 54 correspond to the species listed above.

THIRD SPECIES ELECTION REQUIREMENT:

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Species F: the integrated circuit further comprising an on-chip signal amplification system;

Species G: the integrated circuit further comprising an on-chip signal amplification system and a microprocessor;

Species H: the integrated circuit further comprising an on-chip signal amplification system and an amplifier;

Species I: the integrated circuit further comprising a signal processing system;

Species J: the integrated circuit further comprising a signal processing system and a microprocessor; and

Species K: the integrated circuit further comprising a signal processing system and an amplifier.

The species listed above are distinct because they each have different significant structural elements. The significant structural element of Species F is the on-chip signal amplification system. The significant structural element of Species G is the on-chip signal amplification system plus a microprocessor. The significant structural element of Species H is the on-chip signal amplification system plus the amplifier. The significant structural element of Species I is the signal processing system. The significant structural element of Species J is the signal processing system plus a microprocessor. The significant structural element of Species K is the signal processing system plus an amplifier. Therefore, the above species do not share significant structural elements.

*Claims 57 and 58 correspond to the species listed above.

3. APPLICANT IS REQUIRED TO MAKE **ONE** ELECTECTION **FROM EACH** OF THE THREE SPECIES SETS.

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4. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. The following claim(s) are generic to ALL the species: 42-45, 47-52, 55-56 and 59-69.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The technical feature linking the inventions of claims 42-69 appears to be that they all relate to an integrated biosensor system comprising a sample platform including a plurality receptors and an integrated circuit detector system having a plurality of detection channels including at least one detector.

However, Lockheed Martin Energy Research Corporation, WO 99/27140 and Massachusetts Institute of Technology, WO 93/22678 both teach an integrated biosensor system comprising a sample platform including a plurality receptors and an integrated circuit detector system having a plurality of detection channels including at least one detector (see Abstracts and Fig. 1).

Therefore, the technical feature linking claims 42-69 does not constitute a special technical feature as defined by PCT Rule 13.2 as it does not define a contribution over the prior art and Species Election is proper and therefore, required.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (703) 306-5878. The examiner can normally be reached on 6:30 TO 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on (703) 308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-8724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.


BJ Forman, Ph.D.
Patent Examiner
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September 25, 2002